Human Behavior Course
2004

Schizophrenia & Psychosis One & Two

E. Fuller Torrey, MD

Frederick J. Frese, PhD

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For 15 years until his retirement in 1995, Fred Frese served as Director of Psychology at Western Reserve Psychiatric Hospital, a state-operated facility in the Cleveland-Akron area. A member of the National Alliance for the Mentally Ill (NAMI) since 1989, Dr. Frese is currently the First Vice President of its National Board. He currently serves on the Board of the Summit County Alliance for the Mentally Ill.

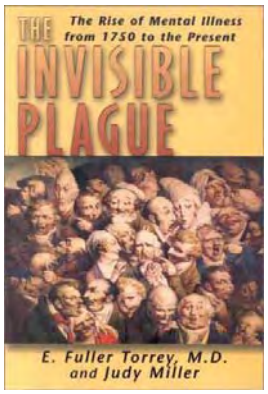
Dr. Frese has given more than 300 presentations on topics related to serious mental illness in 30 states, Canada, Puerto Rico, and Washington, D.C. He has published extensively, and has been on the advisory reviewing boards of five professional journals, including Schizophrenia Bulletin. Along with his wife, Penny, he has also co-produced a widely distributed training video about coping with schizophrenia.

Dr. Frese has been a faculty member at Case Western Reserve University, Kent State, Ohio University, and Ashland Theological Seminary. He has also served as Chairperson of the Akron Area Mental Health Board. Dr. Frese was the founder and first president of Community and State Hospital Psychologists, the American Psychological Association's division for psychologists serving persons with serious mental illness. He also was on the Board of Trustees of the Ohio Psychological Association, where he served as Chair of the committee for the Mentally Ill Homeless. Additionally, he served as president of the National Mental Health Consumers' Association.

Dr. Frese served as a consultant to the Department of Veterans Affairs on a project to improve clinical practice. He has testified before congressional committees on priorities for public mental health services and is a part of the American Psychological Association Task Force for the Seriously Mentally Ill/Seriously Emotionally Disturbed.

E. Fuller Torrey, MD

Dr. Torrey is an internationally respected expert, clinician, and scientist specializing in schizophrenia and bipolar disorder. He is the Executive Director of the Stanley Foundation Research Programs, which supports research on schizophrenia and bipolar disorder. From 1976 to 1985, Dr. Torrey was on the clinical staff at St. Elizabeths Hospital, specializing in the treatment of severe psychiatric disorders. From 1988 to 1992, he directed a study of identical twins with schizophrenia and bipolar disorder. His research has explored viruses as a possible cause of these disorders, and he has carried out research in Ireland and Papua New Guinea. Dr. Torrey was educated at Princeton University (BA, Magna Cum Laude), McGill University (MD), and Stanford University (MA in Anthropology). He trained in psychiatry at Stanford University School of Medicine. He practiced general medicine in Ethiopia for two years as a Peace Corps physician, in the South Bronx in an OEO health center, and in Alaska in the Indian Health Service. From 1970 to 1975, he was a special assistant to the Director of the National Institute of Mental Health.



Dr. Torrey is the author of 17 books and more than 200 lay and professional papers. Some of his books have been translated into Japanese, Russian, Italian, and Polish. His most recent book is “The Invisible Plague: The Rise of Mental Illness from 1750 to the Present”, a book he has just recently published with Judy Miller. Dr. Torrey has appeared on national television (e.g., Donahue, Oprah, 20/20, 60 Minutes, and Dateline) and has written for many newspapers. He received two Commendation Medals from the US Public Health Service, a 1984 Special Families Award from the National Alliance for the Mentally Ill (NAMI), a 1991 National Caring Award, and in 1999 received research wards from the International Congress of Schizophrenia and from NARSAD.

HUMAN BEHAVIOR COURSE 2004
SCHIZOPHRENIA & PSYCHOSIS ONE & TWO – HO & SLIDES

LEARNING OBJECTIVES AND STUDY QUESTIONS FOR DISCUSSION.

1. Know the meaning of the terms and concepts listed in slides one to three below.
2. Define psychosis and know what the cardinal signs & symptoms are. Can psychosis occur without hallucinations?
3. What is a hallucination?
4. What is a delusion?
5. What defense mechanisms are most frequently used in psychosis?
6. Name the different psychotic disorders and whether they are very common (point prevalence > 5%), common (1-5%) or uncommon (<1%) in the general population.
7. Know whether each psychotic disorder is more common in men, more common in women, or occurs in a similar proportion of men and women.
8. What are the diagnostic features of schizophrenia?
9. What is the difference between psychosis and schizophrenia?
10. What are the subtypes of schizophrenia and the hallmarks of each?
11. What is the prognosis of schizophrenia? What features predict a relatively good prognosis? What features predict a relatively poor prognosis?
12. What are the most consistent neuropathological findings associated with schizophrenia?
13. Describe what is known about the psychosocial pathogenesis of schizophrenia and related disorders.
14. What evidence is there that glutamate plays a role in psychosis/schizophrenia?
15. What evidence is there that serotonin plays a role in psychosis/schizophrenia?
16. What neuroanatomic pathways are thought to mediate psychosis/schizophrenia?
17. What are the differences between the various psychotic disorders and schizoid personality disorder? Schizotypal personality disorder? Paranoid personality disorder?
18. What are the diagnostic features of schizoaffective disorder?
19. What are the subtypes of schizoaffective disorder and the hallmarks of each?
20. What are the diagnostic features of delusional disorder?
21. What is the difference between a delusion and delusional disorder?
22. What are the subtypes of delusional disorder and the hallmarks of each?
23. What are the diagnostic features of shared psychotic disorder?

Slide 1

Psychosis & Schizophrenia One & Two – Terms & Concepts

- schizophrenia
- schizophrenia, paranoid type
- schizophrenia, disorganized type
- schizophrenia, undifferentiated type
- schizophrenia, residual type
- schizophrenia, catatonic type
- schizophreniform disorder
- brief psychotic disorder
- schizoaffective disorder
- schizoaffective disorder, bipolar type
- schizoaffective disorder, depressive type
- psychotic disorder due to general medical condition
- delusional disorder
- delusional disorder, erotomanic type
- delusional disorder, grandiose type
- delusional disorder, jealous type
- delusional disorder, persecutory type
- delusional disorder, somatic type
- shared psychotic disorder
- *folie a deux*
- substance-induced psychotic disorder
- first-rank symptoms
- Schneiderian symptoms
- thought echo
- voices commenting

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Slide 2

Psychosis & Schizophrenia One & Two – Terms & Concepts

- voices arguing
- thought insertion
- thought withdrawal
- thought broadcasting
- somatic passivity
- delusion (delusional)
- psychosis (psychotic)
- Bleuler's four 'A's
- deficit (negative) symptoms
- psychoticism
- disorganization
- depressive symptoms
- positive symptoms
- hallucinations
- schizophrenia spectrum disorders
- schizoid personality disorder
- schizotypal personality disorder
- projection
- psychotic defenses
- neurotic defenses
- catatonic behavior
- psychotic factor
- disorganized factor
- negative factor
- prodromal phase
- active phase
- residual phase
- postpsychotic depression
- relapse
- schizotaxia
- stress diathesis model of schizophrenia

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Slide 3

Psychosis & Schizophrenia One & Two – Terms & Concepts

- downward drift hypothesis
- expressed emotion
- social skills training
- intensive insight-oriented therapy
- supportive psychotherapy
- vocational rehabilitation
- day treatment programs
- dopamine theory of schizophrenia
- nigrostriatal tract
- ventral tegmental area
- mesolimbic tract
- mesocortical tract
- tuberoinfundibular tract
- glutamate
- phencyclidine (PCP)
- serotonin
- lysergic acid diethylamide (LSD)
- nonbizarre delusion
- Othello syndrome
- delusions of infestation
- dysmorphophobia
- olfactory reference syndrome
- body dysmorphic disorder

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An Introduction to Schizophrenia

USUHS
March 31, 2004

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Guest Lecturer

Recommended reading for those who want more information:

1. **Torrey, E. Fuller, *Surviving Schizophrenia,* 4th ed. (New York: HarperCollins, 2001)**

2. **Torrey, E. Fuller, and Knable, Michael B., *Surviving Manic Depression* (New York: Basic Books, 2002)**

1. The Importance of Research on Schizophrenia, Bipolar Disorder and Related Psychotic Disorders for the Military

Schizophrenia, bipolar disorder and related psychotic disorders are among the most important psychiatric disorders for the U.S. military. The onset of these disorders is usually between ages 16 to 30, and is thus the same age range as the majority of active duty military personnel. Initial psychotic breaks occur commonly in military settings and can be very disruptive to military operations.

Moreover, these disorders are extremely costly for the military. According to a 1991 survey, veterans with schizophrenia and bipolar disorder utilize approximately two-thirds of the VA mental health budget (1), in large measure because most individuals affected require hospitalization and ongoing services. In addition to the psychiatric services required, according to a 1993 study there were 99,455 veterans with schizophrenia and 15, 743 veterans with bipolar and other psychotic disorders who were receiving service-connected disability benefits at that time. These two diagnoses comprised 33 percent (115,198/346,851) of all veterans receiving service-connected disability benefits but 71 percent of all veterans receiving 100 percent benefits (2). It was estimated at that time that the total annual VA service-connected disability payments to individuals with schizophrenia, bipolar disorder and related psychoses was approximately $1.8 billion (3)

2. Dimensions of Schizophrenia

- Approx 2.2 million Americans are affected in any given year (8 per 1,000)
- At least 40 percent are not receiving treatment (approx 900,000)
- At least as many on streets, in shelters as in all hospitals and related facilities
- More in jails, state prisons than in all hospitals and related facilities
- Increasing episodes of violence by those not being treated (single biggest cause of stigma)
- Increasing victimization: robberies, assaults, rapes, murders
- Public services (psychiatric, housing, rehab) often grossly inadequate
- Total direct, indirect costs (U.S., 2000): $40 billion
- $10 billion spent on federal disability payments (SSI & SSDI)

3. Clinical Aspects

- Onset peaks ages 16-30
- Males earlier and more severe
- Major symptoms include:
    - Alterations of the senses
    - Inability to sort, interpret incoming sensations and respond appropriately
    - Delusions and hallucinations

- Altered sense of self
- Changes in emotions
- Changes in movements
- Changes in behavior
- Decreased awareness of illness

4. Risk Factors

- Genes (predisposing)
- Winter/spring births
- Urban birth/rearing
- Migration
- Cat ownership in childhood
- Perinatal complications

5. Brain Abnormalities (See ref. 4)

- Structural, e.g. increased ventricular size
- Neurological abnormalities: dyskinesias, Parkinsonian, soft signs, decreased pain perception
- Neuropsychological abnormalities: memory, attention, executive function
- Electrophysiological abnormalities: EEG
- Cerebral metabolic abnormalities: PET, SPECT, fMRI

6. Theories of Causation

- Genetic
- Neurochemical
- Infectious
- Developmental

References

1. Wyatt, R.J., de Saint Ghislain, I., Leary, M.C. et. al. An economic evaluation of schizophrenia, 1991. Social Psychiatry and Psychiatric Epidemiology 30: 196-205, 1995.
2. Memorandum from Director, Mental Health and Behavioral Sciences Service, Dept. of Veterans Affairs, April 22, 1993.
3. Testimony of E. Fuller Torrey, M.D. before the House Committee on Appropriations, Subcommittee on VA, HUD and Independent Agencies, May 6, 1993.
4. Torrey, E.F. Studies of individuals with schizophrenia never treated with antipsychotic medications: A review. Schizophrenia Research 58: 101-115, 2002.